<212> PRT

<220>

<213> Homo sapiens

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PF-0701 USA

SEQUENCE LISTING

```
<110> INCYTE GENOMICS, INC.
      TANG, Y. Tom
      YUE, Henry
      LAL, Preeti
      BURFORD, Neil
      BANDMAN, Olga
      BAUGHN, Mariah R.
      AZIMZAI, Yalda
      LU, Dyung Aina M.
       PATTERSON, Chandra
<120> EXTRACELLULAR SIGNALING MOLECULES
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 <141> Herewith
 <150> 60/134,949; 60/144,270; 60/146,700; 60/157,508
 <151> 1999-05-19; 1999-07-15; 1999-07-30; 1999-10-04
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  Leu Gln Ser Pro Ser Tyr Glu Lys Leu Val Gly Cys Cys Leu Met
                    20
                                         40
   Thr Arg Gly Cys Phe Ser Pro Ser Val Met Leu Pro Ser Ala Ala
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   Pro Ser Gln Gln Asp Ser Pro Ser His Ser Arg Ala Pro Gly Pro
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   Cys Ser
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Ser Ile Cys Cys Phe Val Phe Ser Ser Glu Glu Ser Lys Asn Tyr
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Lys Ile Ser Leu Ile Val Tyr Leu Thr Phe Leu Thr Met Glu Thr
                                     40
                 35
Lys Pro Arg Asn Ser Ile Tyr Ser Val Leu Thr Gln Ser Thr His
                 50
                                     55
Pro Asp Phe Glu Ser Pro Arg Thr Gly Val Pro Asn Pro Arg Ala
                                     70
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Glu Asp Gln Tyr Gln Phe Glu Ala Tyr Tyr Arg Val Thr
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Met Ser Met Gln Phe Leu Phe Lys Met Val Ala Leu Cys Cys
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Leu Trp Lys Ile Ser Gly Cys Glu Glu Val Pro Leu Thr Tyr Asn
                                     25
                 2.0
Leu Leu Lys Cys Leu Leu Asp Lys Ala His Cys Val Leu Leu Thr
                                      40
Pro Cys Gly Tyr Ile Phe Ser Leu Ile Ser Pro Glu Ile Leu Lys
                                      55
                 50
Leu Thr Leu Ile Thr Leu Gln Ile Leu Leu Lle Leu Lys Asn Leu
His Leu Leu Trp Leu Thr Val Ser Ser Arg Cys Val His Arg Ser
                                     85
                 80
Ser Ala Arg Lys Glu Lys
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Met Arg Leu Ser Leu Pro Leu Gly Ser Leu Leu Trp Pro Phe Leu
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Val Cys Gly Cys Leu Leu Gln Val Ala Leu Cys Gln Thr Arg Ser

Ala Pro His Leu Asp Thr His Ser Pro Val Ala Phe Gln Cys Ser

20

25

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PF-0701 USA
                                     40
Gly Arg Lys Pro Val Ser Leu Asp Val Lys Leu Thr Leu Met Gly
                                      55
Trp Gly Arg Gly Leu Gly Arg Gly Gly Arg Gly Glu Gly Thr
                                      70
                 65
Glu Leu Arg Ile Ser Trp Ser Ala Leu Gln Ala Gln Arg Arg Ser
                 80
                                     85
Ala Lys Val Leu Asn Arg Phe Ser Leu Glu Ile Lys Asn Pro
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Met Leu Met Phe Ile Lys Gly Leu Ser Ser Thr Leu Phe Leu Gly
 1
                                      10
Ser Thr Leu Ser His Arg Asp Pro Ile Cys Phe Tyr Ser Phe His
                 20
                                     25
Phe His Leu Tyr Leu Leu Pro His Ala Val Ser Pro Val Thr Asn
                                      40
                 35
Ser Ile Tyr Asn Tyr Leu Leu Gly Leu Tyr Leu Asp Thr Cys Thr
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Met Pro Lys Ser Gln Ser His His Leu Thr Gln Leu Gln Leu Leu
                                     10
Pro Ser Cys Leu Leu Gly Leu Leu Pro Pro Val Pro Ala Val His
                 20
                                      25
Ala Tyr Ile Leu Gln Gly Cys Val Leu Ser Gly Arg Glu Ile Phe
                 35
                                      40
Phe Ser Val Leu Gln Phe Phe Thr Gln Thr Phe Ser Phe Val Val
                 50
                                      55
Pro Val Phe Pro Ser Phe Pro Gly Gly Phe Arg Leu Pro Phe Ser
                                      70
                 65
Ser Pro Trp Leu Ser Leu Cys Pro Ile His Arg Ser Thr Leu Gln
Ala Cys Leu Tyr Glu Arg Gly Leu Phe Leu Cys Arg Lys Leu Thr
                 95
                                     100
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Leu Thr Arg Cys Gly Cys Ser Tyr Thr Asp Leu Ile

110

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PF-0701 USA
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Met Arg Ala Lys Gly Phe Leu Ala Pro Ser Leu Val Leu Ala Val
                  5
Ser Leu Glu Leu Met His Pro Asp Ala Asn Ser Pro Ser Glu Cys
                                      2.5
Arg Gly Asp Glu Thr Leu Thr Gly Gln Phe Asn Leu Tyr Met Gly
                 35
Asp Lys Leu Glu Gly Lys Thr Asn Gly Arg Arg Val Lys Arg Lys
                                      55
                  50
Leu Asn Tyr Cys Ala Asn Thr Arg His Ser Asn Pro Gly Gly Tyr
                                     70
                  65
Cys Arg Val Asn Asn Asp Arg Tyr Tyr Phe Val
                 80
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 Met Arg Cys Arg Leu Leu Ala Gly Ala Leu Val Leu His Leu
                                       10
 Arg Leu Ser Ile Trp Leu Leu Gly Leu Pro His Ser Met Ala Asp
                  20
 Gly Leu Arg Glu Gly Ala Phe Pro Asn Lys Gly Pro His Lys Leu
                                       40
                  35
  Asp Leu Trp Arg Ala Ser Leu Arg Ser His Pro Val Ser His Gly
                                       55
                   50
  Pro His Phe Ile Gly Tyr Arg Ala Ser Gln Phe Glu Gly Glu Glu
                   65
  Lys Tyr Val Ala Val Tyr Ala Val Ser Ser Ala Ser Leu Leu Pro
                                       85
                   80
  Ala Leu Pro Val Pro Val Leu Arg Ala Ala Leu Ala Glu Gln Met
                                      100
                   95
  Tyr Leu Leu Ser
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                                     10
Gly Pro Gly Phe Ser Gln Leu Cys Val Arg Val Ser Gln Val Ser
                                      25
                 2.0
Arg Asn Pro Met Arg Ser Glu Gly Cys Phe Gly Leu Leu Lys Ser
Val Gln Asp Asn Pro Ala Ser Ala Leu Glu Leu Leu Asp Phe Ser
Asp Ile Gln Val Asn Ala Glu Phe Asp Gly Leu Ala Ser Ser Val
                                      70
                  65
Arg Gly Ile Leu Pro Glu Leu Cys Ile Lys Thr Gly Ala Cys Arg
                                      85
                  80
Val Glu Tyr Lys Lys Glu Leu Leu Pro Val Phe Arg Ser Ala Leu
                                     100
                  95
 Pro Ala Ser Val Pro Lys
                 110
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 <211> 182
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 Met Glu Pro Gln Leu Gly Pro Glu Ala Ala Ala Leu Arg Pro Gly
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 Trp Leu Ala Leu Leu Trp Val Ser Ala Leu Ser Cys Ser Phe
                                       2.5
                   20
 Ser Leu Pro Ala Ser Ser Leu Ser Ser Leu Val Pro Gln Val Arg
                                       40
 Thr Ser Tyr Asn Phe Gly Arg Thr Phe Leu Gly Leu Asp Lys Cys
                                       55
                   50
  Asn Ala Cys Ile Gly Thr Ser Ile Cys Lys Lys Phe Phe Lys Glu
                                       70
                   65
  Glu Ile Arg Ser Asp Asn Trp Leu Ala Ser His Leu Gly Leu Pro
                                        85
  Pro Asp Ser Leu Leu Ser Tyr Pro Ala Asn Tyr Ser Asp Asp Ser
                                       100
                   95
  Lys Ile Trp Arg Pro Val Glu Ile Phe Arg Leu Val Ser Lys Tyr
                                       115
                  110
  Gln Asn Glu Ile Ser Asp Arg Ile Cys Ala Ser Ala Ser Ala
                                       130
                  125
  Pro Lys Thr Cys Ser Ile Glu Arg Val Leu Arg Lys Thr Glu Arg
                                       145
                   140
  Phe Gln Lys Trp Leu Gln Ala Lys Arg Leu Thr Pro Asp Leu Val
                                       160
                   155
  Gln Asp Cys His Gln Gly Gln Arg Glu Leu Lys Phe Leu Cys Met
                                       175
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170

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Leu Arg
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Met Arg Gly Ala Thr Arg Val Ser Ile Met Leu Leu Leu Val Thr
                                      10
Val Ser Asp Cys Ala Val Ile Thr Gly Ala Cys Glu Arg Asp Val
Gln Cys Gly Ala Gly Thr Cys Cys Ala Ile Ser Leu Trp Leu Arg
                                                          45
                                      40
                 35
Gly Leu Arg Met Cys Thr Pro Leu Gly Arg Glu Glu Glu Cys
                 50
                                      55
His Pro Gly Ser His Lys Val Pro Phe Phe Arg Lys Arg Lys His
                                      70
                 65
His Thr Cys Pro Cys Leu Pro Asn Leu Leu Cys Ser Arg Phe Pro
                                      85
                 80
Asp Gly Arg Tyr Arg Cys Ser Met Asp Leu Lys Asn Ile Asn Phe
                                     100
                 95
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Met Glu Gly Pro Glu Phe Leu Arg Thr Ala Thr Ser Ala Ser Gly
                                      10
Arg Gly Glu His Arg Ala Glu Gly Val Cys Ser Arg Leu Arg Glu
                 2.0
                                      25
Ala Ala Arg Arg Arg Gly Arg Pro Ser Leu Lys Gly Lys Arg Lys
                                      40
Arg Gly Ser Ala Ser Ile Pro Glu Arg Gly Leu Gly Arg Met Lys
                                      55
Thr Ser Ala Glu Leu His Glu Gln Glu Lys Pro Pro Ser Ser Pro
                                      70
Arg Ala Thr Gly Pro Gly Arg Leu Gly His Ala Arg Gly Arg Gly
                                      85
                 80
Pro Asp Ala Leu Arg Gly Gly Ala Ala Gly Pro Gly Arg Ala Ser
                                     100
                 95
Ser Gly Ala Pro Arg Glu Arg Lys Met Ala Pro His Gly Pro Gly
                                     115
                110
Ser Leu Thr Thr Leu Val Pro Trp Ala Ala Ala Leu Leu Leu Ala
```

```
130
                125
Leu Gly Val Glu Arg Ala Leu Ala Leu Pro Glu Ile Cys Thr Gln
                140
                                     145
Cys Pro Gly Ser Val Gln Asn Leu Ser Lys Val Ala Phe Tyr Cys
                155
                                     160
Lys Thr Thr Arg Glu Leu Met Leu His Ala Arg Cys Cys Leu Asn
                170
                                    175
Gln Lys Gly Thr Ile Leu Gly Leu Asp Leu Gln Asn Cys Ser Leu
                185
                                     190
Glu Asp Pro Gly Pro Asn Phe His Gln Ala His Thr Thr Val Ile
                200
                                     205
Ile Asp Leu Gln Ala Asn Pro Leu Lys Gly Asp Leu Ala Asn Thr
                215
                                     220
Phe Arg Gly Phe Thr Gln Leu Gln Thr Leu Ile Leu Pro Gln His
                230
                                     235
Val Asn Cys Pro Gly Gly Ile Asn Ala Trp Asn Thr Ile Thr Ser
                                     250
Tyr Ile Asp Asn Gln Ile Cys Gln Gly Gln Lys Asn Leu Cys Asn
                260
                                     265
Asn Thr Gly Asp Pro Glu Met Cys Pro Glu Asn Gly Ser Cys Val
                275
                                    280
Pro Asp Gly Pro Gly Leu Leu Gln Cys Val Cys Ala Asp Gly Phe
                290
                                     295
His Gly Tyr Lys Cys Met Arg Gln Gly Ser Phe Ser Leu Leu Met
                305
                                    310
Phe Phe Gly Ile Leu Gly Ala Thr Thr Leu Ser Val Ser Ile Leu
                320
                                    325
Leu Trp Ala Thr Gln Arg Arg Lys Ala Lys Thr Ser
                335
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Met Val Pro Glu Val Arg Val Leu Ser Ser Leu Leu Gly Leu Ala
                                     10
Leu Leu Trp Phe Pro Leu Asp Ser His Ala Arg Ala Arg Pro Asp
                                     25
                 20
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 Met
 Val
 Pro
 Glu
 Val
 Arg
 Val
 Leu
 Ser
 Ser
 Leu
 Leu
 Gly
 Leu
 Ala
 Arg
 Ala
 Arg
 Pro
 Asp

 Leu
 Leu
 Trp
 Phe
 Pro
 Leu
 Asp
 Ser
 His
 Ala
 Arg
 Arg
 Ala
 Arg
 Ala
 Arg
 Arg
 Try
 Ser
 Pro
 Glu
 Ser
 Ala
 Arg
 Arg
 Ala
 Ala
 Arg
 Ala
 Arg
 Arg
 Arg
 Ala
 Arg
 Arg
 Ala
 Arg
 Arg
 Ala
 Arg
 Arg

```
115
                110
Gly Glu Ile Phe Ser Ala His Glu Leu Phe Pro Ser Arg Leu Pro
                                    130
                125
Asn Gln Cys Val Leu Cys Ser Cys Thr Glu Gly Gln Ile Tyr Cys
                                    145
                140
Gly Leu Thr Thr Cys Pro Glu Pro Gly Cys Pro Ala Pro Leu Pro
                                    160
                155
Leu Pro Asp Ser Cys Cys Gln Ala Cys Lys Asp Glu Ala Ser Glu
                                    175
                170
Gln Ser Asp Glu Glu Asp Ser Val Gln Ser Leu His Gly Val Arg
                                    190
                185
His Pro Gln Asp Pro Cys Ser Ser Asp Ala Gly Arg Lys Arg Gly
                                    205
                200
Pro Gly Thr Pro Ala Pro Thr Gly Leu Ser Ala Pro Leu Ser Phe
                215
                                     220
Ile Pro Arg His Phe Arg Pro Lys Gly Ala Gly Ser Thr Thr Val
                                     235
Lys Ile Val Leu Lys Glu Lys His Lys Lys Ala Cys Val His Gly
                                     250
                245
Gly Lys Thr Tyr Ser His Gly Glu Val Trp His Pro Ala Phe Arg
                                     265
                260
Ala Phe Gly Pro Leu Pro Cys Ile Leu Cys Thr Cys Glu Asp Gly
                                     280
                275
Arg Gln Asp Cys Gln Arg Val Thr Cys Pro Thr Glu Tyr Pro Cys
                                     295
                290
Arg His Pro Glu Lys Val Ala Gly Lys Cys Cys Lys Ile Cys Pro
                                     310
                305
Glu Asp Lys Ala Asp Pro Gly His Ser Glu Ile Ser Ser Thr Arg
                                     325
                320
Cys Pro Lys Ala Pro Gly Arg Val Leu Val His Thr Ser Val Ser
                                     340
                335
Pro Ser Pro Asp Asn Leu Arg Arg Phe Ala Leu Glu His Glu Ala
                                     355
Ser Asp Leu Val Glu Ile Tyr Leu Trp Lys Leu Val Lys Asp Glu
                                     370
                 365
Glu Thr Glu Ala Gln Arg Gly Glu Val Pro Gly Pro Arg Pro His
                                     385
Ser Gln Asn Leu Pro Leu Asp Ser Asp Gln Glu Ser Gln Glu Ala
                                     400
                 395
Arg Leu Pro Glu Arg Gly Thr Ala Leu Pro Thr Ala Arg Trp Pro
                 410
                                     415
Pro Arg Arg Ser Leu Glu Arg Leu Pro Ser Pro Asp Pro Gly Ala
                                     430
                 425
Glu Gly His Gly Gln Ser Arg Gln Ser Asp Gln Asp Ile Thr Lys
                                     445
                 440
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Thr

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<213> Homo sapiens

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Thr Ala Gln Gly Arg Ala Val Pro Gly Gly Ser Ser Pro Ala Trp
                                     2.5
Thr Gln Cys Gln Gln Leu Ser Gln Lys Leu Cys Thr Leu Ala Trp
                                     40
Ser Ala His Pro Leu Val Gly His Met Asp Leu Arg Glu Glu Gly
                                     55
Asp Glu Glu Thr Thr Asn Asp Val Pro His Ile Gln Cys Gly Asp
                                     70
Gly Cys Asp Pro Gln Gly Leu Arg Asp Asn Ser Gln Phe Cys Leu
Gln Arg Ile His Gln Gly Leu Ile Phe Tyr Glu Lys Leu Leu Gly
                 95
Ser Asp Ile Phe Thr Gly Glu Pro Ser Leu Leu Pro Asp Ser Pro
                110
Val Gly Gln Leu His Ala Ser Leu Leu Gly Leu Ser Gln Leu Leu
                                     130
                125
Gln Pro Glu Gly His His Trp Glu Thr Gln Gln Ile Pro Ser Leu
                                     145
                140
 Ser Pro Ser Gln Pro Trp Gln Arg Leu Leu Arg Phe Lys Ile
                                     160
                 155
 Leu Arg Ser Leu Gln Ala Phe Val Ala Val Ala Ala Arg Val Phe
                                     175
                 170
 Ala His Gly Ala Ala Thr Leu Ser Pro
                 185
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Met Gly Ala Val Met Gly Thr Phe Ser Ser Leu Gln Thr Lys Gln Arg Arg Pro Ser Lys Asp Lys Ile Glu Asp Glu Leu Glu Met Thr Met Val Cys His Arg Pro Glu Gly Leu Glu Gln Leu Glu Ala Gln 40 35 Thr Asn Phe Thr Lys Arg Glu Leu Gln Val Leu Tyr Arg Gly Phe 55 50 Lys Asn Glu Cys Pro Ser Gly Val Val Asn Glu Asp Thr Phe Lys Gln Ile Tyr Ala Gln Phe Phe Pro His Gly Asp Ala Ser Thr Tyr 85 80 Ala His Tyr Leu Phe Asn Ala Phe Asp Thr Thr Gln Thr Gly Ser 100 95 Val Lys Phe Glu Asp Phe Val Thr Ala Leu Ser Ile Leu Leu Arg

<213> Homo sapiens

```
PF-0701 USA
                                                         120
                                    115
                110
Gly Thr Val His Glu Lys Leu Arg Trp Thr Phe Asn Leu Tyr Asp
                                    130
                125
Ile Asn Lys Asp Gly Tyr Ile Asn Lys Glu Glu Met Met Asp Ile
                                    145
Val Lys Ala Ile Tyr Asp Met Met Gly Lys Tyr Thr Tyr Pro Val
                                     160
                155
Leu Lys Glu Asp Thr Pro Arg Gln His Val Asp Val Phe Phe Gln
                                     175
Lys Met Asp Lys Asn Lys Asp Gly Ile Val Thr Leu Asp Glu Phe
                                     190
                185
Leu Glu Ser Cys Gln Glu Asp Asp Asn Ile Met Arg Ser Leu Gln
                                                         210
                200
Leu Phe Gln Asn Val Met
                 215
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 Met Ala Ala Ala Arg Leu Cys Leu Ser Leu Leu Leu Ser Thr
 Cys Val Ala Leu Leu Gln Pro Leu Leu Gly Ala Gln Gly Ala
                                       25
                  2.0
 Pro Leu Glu Pro Val Tyr Pro Gly Asp Asn Ala Thr Pro Glu Gln
                  35
 Met Ala Gln Tyr Ala Ala Asp Leu Arg Arg Tyr Ile Asn Met Leu
                                       55
 Thr Arg Pro Arg Cys Val Pro Gln Leu Gly Arg Glu Ile Pro Ala
                                       70
                   65
 Pro Gly Thr Leu Gly Pro Leu His Ile Pro Gly His Thr Leu Ser
                                                           90
                                       85
                   80
 Pro Ala Pro Ala Pro Ala Pro Ser Arg Pro Ala Leu Gly Lys Thr
                                      100
                   95
 Gly His Leu Cys Ser Thr Gly Leu Asp Gln Cys Ala Leu Gly Lys
                                      115
                  110
 Met Val Pro Thr Gly Arg Tyr Glu Thr Gly Gly Leu Ala Pro Gly
                                                           135
                                      130
                  125
 His Ser Ala Cys Pro Cys Cys Leu Phe Pro Pro Arg Tyr Gly Lys
                                      145
                  140
 Arg His Lys Glu Asp Thr Leu Ala Phe Ser Glu Trp Gly Ser Pro
                                      160
                  155
 His Ala Ala Val Pro Arg Glu Leu Ser Pro Leu Asp Leu
                                       175
                  170
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Met Glu Pro Gly Asn Arg Ser Leu Asn Pro His Lys Thr Lys His
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His Met Glu Cys Arg Val Thr Gly Arg Ala Glu Val Thr Ala Ser
                                     25
Arg Glu Gly Arg Gly Ala Cys Ala Trp Glu Cys Gly Ser Ser Arg
                                     40
Gly Pro Trp Gly Leu Leu Arg Tyr Thr Phe Ala Pro Val Arg Ala
Ser Arg Pro Trp Ala Cys Leu Pro Lys Gly Ser Leu Ser Gln Arg
Pro Lys Leu Pro Pro Pro Val His Leu Pro Pro Lys Ser Ser Cys
                                     85
                 80
Pro Pro Arg Ala Gly Gly Gly Ala Gln Gly Arg Gly Val Pro
                                    100
                 95
Cys Thr Tyr Leu Ser Pro Leu Ser His Ser Pro Lys Thr Phe Cys
                110
                                    115
Thr Phe Leu Gln Gly Cys Pro Ser Gln Gln Phe Pro Ser Trp Leu
                125
                                    130
Ile Lys Pro Ser Asp Trp Cys Cys Val Pro Ser Leu Trp Pro Leu
                140
                                    145
Cys Gly Glu Arg Gly Leu Gln Gly Glu Glu Pro Gly Arg Asp Ser
                155
                                    160
Gln Ala Ser Pro Trp Glu Gly Gly Ala Ser Arg Arg
               170
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Met Ala Ala Leu Gln Lys Ser Val Ser Ser Phe Leu Met Gly Thr
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                                     10
Leu Ala Thr Ser Cys Leu Leu Leu Leu Ala Leu Leu Val Gln Gly
                 20
                                     25
Gly Ala Ala Aro Ile Ser Ser His Cys Arg Leu Asp Lys Ser
                 35
                                     40
Asn Phe Gln Gln Pro Tyr Ile Thr Asn Arg Thr Phe Met Leu Ala
                 50
                                     55
Lys Glu Ala Ser Leu Ala Asp Asn Asn Thr Asp Val Arg Leu Ile
                                     70
                 65
Gly Glu Lys Leu Phe His Gly Val Ser Met Ser Glu Arg Cys Tyr
                 80
                                     85
Leu Met Lys Gln Val Leu Asn Phe Thr Leu Glu Glu Val Leu Phe
                                    100
```

Pro Gln Ser Asp Arg Phe Gln Pro Tyr Met Gln Glu Val Val Pro

<213> Homo sapiens

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PF-0701 USA
                110
Phe Leu Ala Arg Leu Ser Asn Arg Leu Ser Thr Cys His Ile Glu
                                    130
                125
Gly Asp Asp Leu His Ile Gln Arg Asn Val Gln Lys Leu Lys Asp
                                    145
                140
Thr Val Lys Lys Leu Gly Glu Ser Gly Glu Ile Lys Ala Ile Gly
                                    160
Glu Leu Asp Leu Leu Phe Met Ser Leu Arg Asn Ala Cys Ile
                                    175
                170
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Met Ala Leu Leu Arg Lys Ser Tyr Ser Glu Pro Gln Leu Lys Gly
Ile Val Thr Lys Leu Tyr Ser Arg Gln Gly Tyr His Leu Gln Leu
                                      25
                 20
Gln Ala Asp Gly Thr Ile Asp Gly Thr Lys Asp Glu Asp Ser Thr
                                      40
                  35
 Tyr Thr Leu Phe Asn Leu Ile Pro Val Gly Leu Arg Val Val Ala
                                      55
 Ile Gln Gly Val Gln Thr Lys Leu Tyr Leu Ala Met Asn Ser Glu
                                      70
 Gly Tyr Leu Tyr Thr Ser Glu Leu Phe Thr Pro Glu Cys Lys Phe
                                      85
                  80
 Lys Glu Ser Val Phe Glu Asn Tyr Tyr Val Thr Tyr Ser Ser Met
                                      100
                  95
 Ile Tyr Arg Gln Gln Gln Ser Gly Arg Gly Trp Tyr Leu Gly Leu
                                      115
                 110
 Asn Lys Glu Gly Glu Ile Met Lys Gly Asn His Val Lys Lys Asn
                                      130
                 125
 Lys Pro Ala Ala His Phe Leu Pro Lys Pro Leu Lys Val Ala Met
                                      145
                 140
 Tyr Lys Glu Pro Ser Leu His Asp Leu Thr Glu Phe Ser Arg Ser
                                     160
                  155
 Gly Ser Gly Thr Pro Thr Lys Ser Arg Ser Val Ser Gly Val Leu
                                      175
                  170
 Asn Gly Gly Lys Ser Met Ser His Asn Glu Ser Thr Pro Val Arg
                                      190
                  185
 Ala Lys Glu Gly Leu Cys Asn Arg Thr Leu Pro Pro Gly Ala Val
                                      205
                  200
 Glu Phe Phe
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PF-0701 USA
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Met Ala Ile Cys Pro Leu His Ser Ala Gly Gln Val Ala Cys Pro
His Tyr Ile His Leu Leu Thr Pro Leu Pro Trp Met Asp Gln Trp
                                      25
Trp Cys His Pro Lys Gln Ile Asp Thr Ile Phe Pro Leu Val Thr
Ala Lys Gly Glu Asn His Pro Ser Pro Asn Phe Asn Gln Tyr Val
                 50
Arg Asp Gln Gly Ala Met Thr Asp Gln Leu Ser Arg Arg Gln Ile
Arg Glu Tyr Gln Leu Tyr Ser Arg Thr Ser Gly Lys His Val Gln
                                      85
                 8.0
Val Thr Gly Arg Arg Ile Ser Ala Thr Ala Glu Asp Gly Asn Lys
                                     100
                  95
 Phe Ala Lys Leu Ile Val Glu Thr Asp Thr Phe Gly Ser Arg Val
                                     115
                 110
 Arg Ile Lys Gly Ala Glu Ser Glu Lys Tyr Ile Cys Met Asn Lys
                                                          135
                                     130
                 125
 Arg Gly Lys Leu Ile Gly Lys Pro Ser Gly Lys Ser Lys Asp Cys
                                     145
                 140
 Val Phe Thr Glu Ile Val Leu Glu Asn Asn Tyr Thr Ala Phe Gln
                                     160
 Asn Ala Arg His Glu Gly Trp Phe Met Ala Phe Thr Arg Gln Gly
                                     175
                 170
 Arg Pro Arg Gln Ala Ser Arg Ser Arg Gln Asn Gln Arg Glu Ala
                                      190
                 185
 His Phe Ile Lys Arg Leu Tyr Gln Gly Gln Leu Pro Leu Thr Asn
                 200
 His Ala Glu Lys Gln Lys Gln Phe Glu Phe Val Gly Ser Ala Pro
                                      220
                 215
 Thr Arg Arg Ala Lys Arg Thr Arg Arg Pro Gln Pro Leu Thr
                                      235
                  230
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                                       10
  Lys Ser Gln Asp Thr Glu Glu Thr Ile Thr Tyr Thr Gln Cys Thr
                                        25
                   20
  Asp Gly Tyr Glu Trp Asp Pro Val Arg Gln Gln Cys Lys Asp Ile
                                        40
  Asp Glu Cys Asp Ile Val Pro Asp Ala Cys Lys Gly Gly Met Lys
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				50					55					60
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Pro	Gly	Phe	Gln	Leu 245	Ala	Ala	Asn	Asn	Tyr 250	Thr	Суѕ	Val	Asp	Ile 255
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Glu	Phe	Tyr	Leu	Arg 440	Gln	Thr	Ser	Pro	Val 445	Ser	Ala	Met	Leu	Val 450
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PF-0701 USA												
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